SHARP SERVICE MANUAL

No. S4129QT80W///

STEREO RADIO CASSETTE RECORDER

MODEL QT-80W

• In the interests of user-safety the set should be restored to its original condition and only parts identical to those specified should be used.

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SHARP CORPORATION

This document has been published to be used for after sales service only.
The contents are subject to change without notice.

QT-80W

FOR A COMPLETE DESCRIPTION OF THE OPERATION OF THIS UNIT, PLEASE REFER TO THE OPERATION MANUAL.

SPECIFICATIONS

■ General

Power source	AC 110-127/220-240 V, 50/60 Hz DC 12 V [“D” size (UM/SUM-1, R20 or HP-2) battery x 8]
Power consumption	20 W
Output power	MPO: 18 W (9 W + 9 W) (AC operation, 10 % T.H.D) RMS: 10 W (5 W + 5 W) (DC operation, 10 % T.H.D)
Speakers	8 cm (3-1/8”) full range speaker x 4
Output terminal	Headphones: 16-50 ohms (recommended: 32 ohms)
Input terminals	Mixing microphone: 600 ohms Line input: 350 mV/47 kohms
Dimensions	Width: 520 mm (20-1/2”) Height: 191 mm (7-1/2”) Depth: 216 mm (8-1/2”)
Weight	4.2 kg (9.3 lbs.) without batteries

■ Radio

Frequency range	FM: 88 - 108 MHz SW1: 2.3 - 7.3 MHz SW2: 7.3 - 22 MHz MW: 526.5 - 1,606.5 kHz

■ Tape recorder

Frequency response	60 - 12,000 Hz (Normal tape)
Signal/noise ratio	40 dB
Wow and flutter	0.3 % (WRMS)
Motor	DC 9 V electric governor
Bias system	AC bias
Erase system	Magnet erase

Specifications for this model are subject to change without prior notice.

VOLTAGE SELECTION

Before operating the unit on mains, check the preset voltage. If the voltage is different from your local voltage, adjust the voltage as follows. Slide the selector with a screwdriver to the appropriate voltage number. (AC 110 - 127 V or AC 220 - 240 V)

AC POWER SUPPLY CORD AND AC PLUG ADAPTOR

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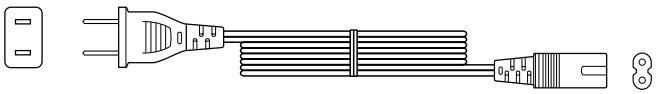

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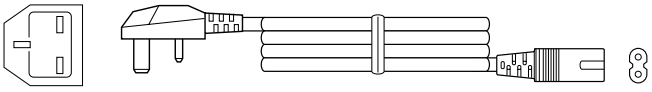

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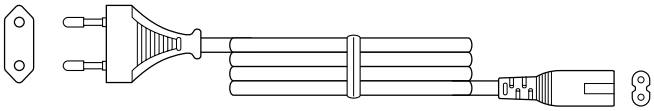

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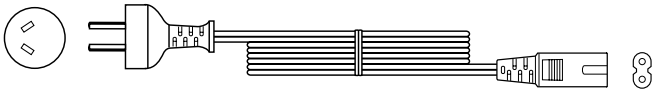

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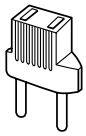
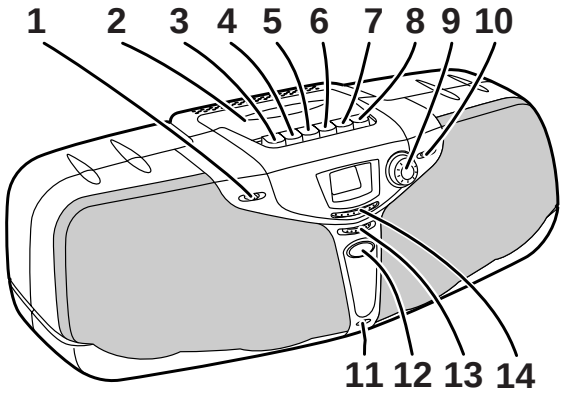
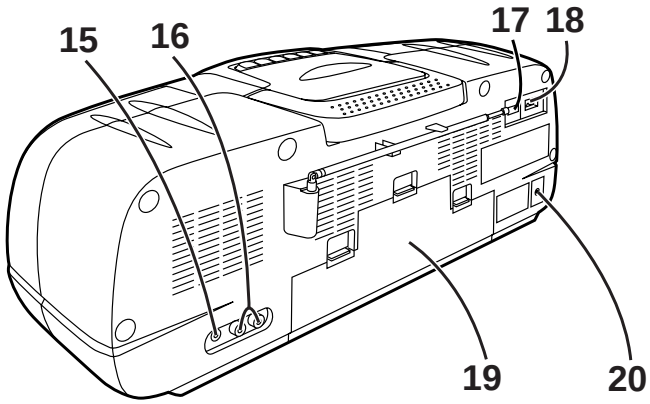


QPLGA0004AWZZ

NAMES OF PARTS

1. Function/Beat Cancel Switch
2. Cassette Compartment
3. Record Button
4. Play Button
5. Rewind Button
6. Fast Forward Button
7. Stop/Eject Button
8. Pause Button
9. Volume Control
10. Band Selector
11. Built-in Microphone
12. Extra Bass Button
13. Fine Tuning Control
14. Tuning Control
15. Mixing Microphone Socket
16. Line Input Sockets
17. AC Voltage Selector
18. AC Input Socket
19. Battery Compartment
20. Headphone Socket





HOW TO SET THE POINT "0" ON TUNER DIAL MEMORY

1. Remove the front cabinet and main PWB. (Refer to page 4, of disassembly section.)
2. Turn the gear dial in the arrowed direction until it stops so that the "▼" mark comes to the front of main PWB.
3. When the tuning knob is set at 2, adjust it from above so that its "0" point rib comes to the right of "0" point rib of the dial drum when you face the unit.
4. Check the tuning display label by turning the tuning knob. The frequency band will be FM 88 - 108 MHz when the dial is turned counter-clockwise.
5. Reassemble the front cabinet.

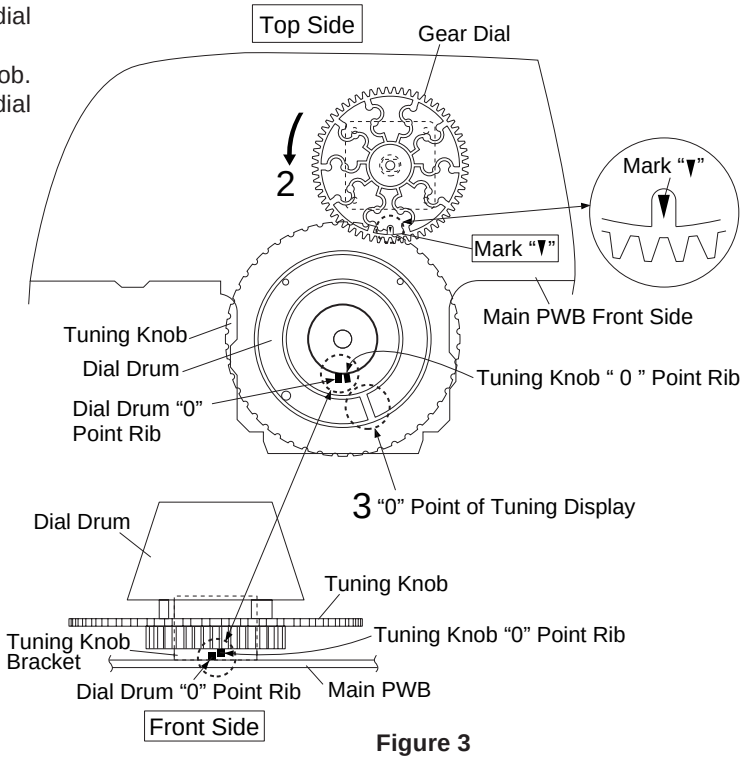


Figure 3

DISASSEMBLY

Caution on Disassembly
Follow the below-mentioned notes when disassembling the unit and reassembling it, to keep it safe and ensure excellent performance:
1. Take cassette tape out of the unit.
2. Be sure to remove the power supply plug from the wall outlet before starting to disassemble the unit.
3. Take off nylon bands or wire holders where they need to be removed when disassembling the unit. After servicing the unit, be sure to rearrange the leads where they were before disassembling.
4. Take sufficient care on static electricity of integrated circuits and other circuits when servicing.

STEP	REMOVAL	PROCEDURE	FIGURE
1	Rear Cabinet	1. Battery Lid ..... (A1) x1 2. Screw ..... (A2) x6 3. Screw ..... (A3) x4	4-1
2	Front Cabinet	1. Knob ..... (B1) x1 2. Nut ..... (B2) x1 3. Socket ..... (B3) x3	4-1 4-2
3	Jack PWB	1. Socket ..... (C1) x2 2. Screw ..... (C2) x2	4-2
4	Volume PWB	1. Socket ..... (D1) x1	4-2
5	Battery PWB	1. Socket ..... (E1) x1 2. Hook ..... (E2) x1	4-2
6	Headphones PWB	1. Socket ..... (F1) x1 2. Screw ..... (F2) x1	4-2
7	Main PWB with Tape Mechanism	1. Screw ..... (G1) x2 2. Screw ..... (G2) x1	4-2
8	Main PWB	1. Socket ..... (H1) x2 2. Screw ..... (H2) x4 3. Solder ..... (H3) x2	4-3
9	Tape Mechanism	1. Open the cassette holder. 2. Screw ..... (J1) x4	5-1
10	X-BASS PWB	1. Screw ..... (K1) x3	5-2

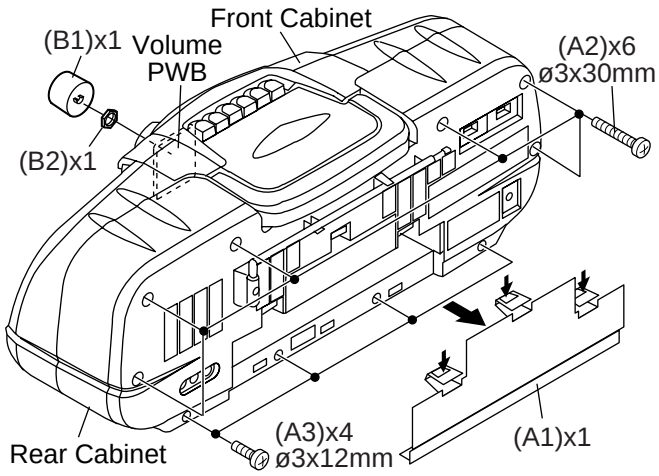


Figure 4-1

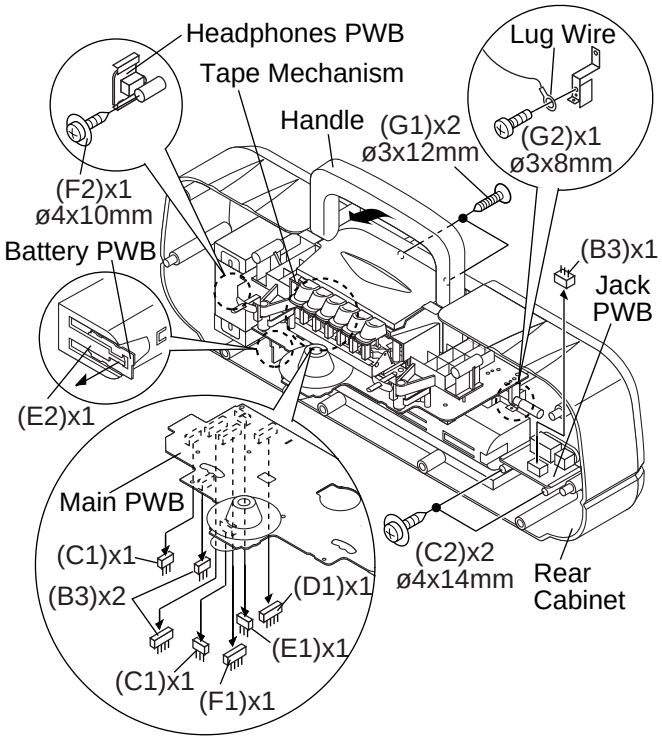


Figure 4-2

How to attach the tuning display label (See Fig. 4-4.)

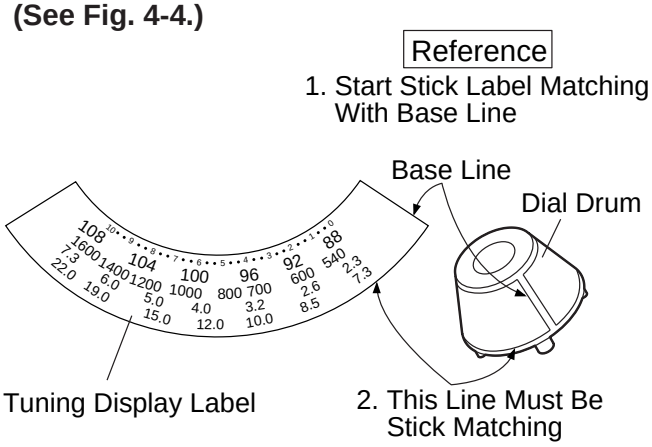


Figure 4-4

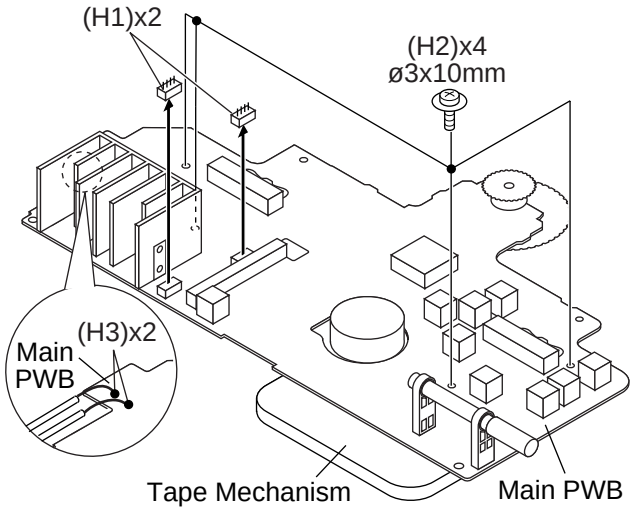


Figure 4-3

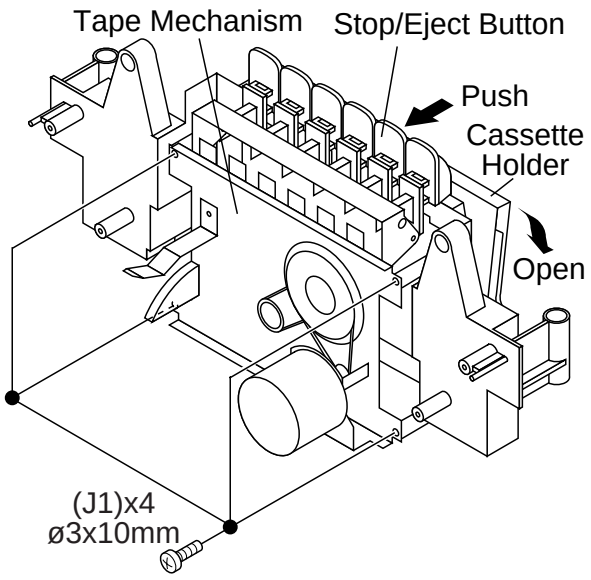


Figure 5-1

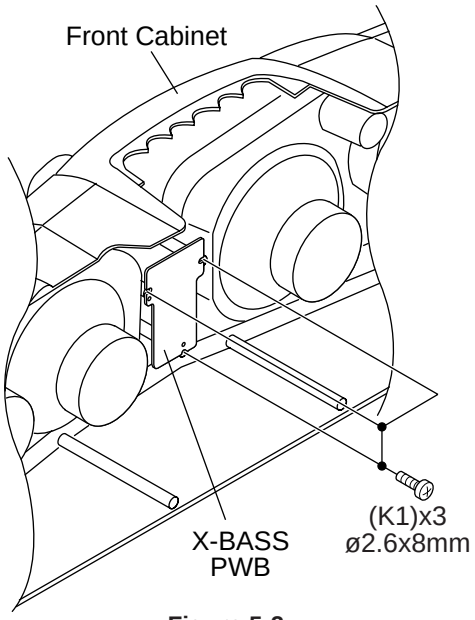


Figure 5-2

REMOVING AND REINSTALLING THE MAIN PARTS

TAPE MECHANISM SECTION

Perform steps 1 to 9 of the disassembly method to remove the tape mechanism. (See page 4.)

How to remove the record / playback and erase heads (See Fig. 5-3.)

1. Remove the screws (A1) x 2 pcs., to remove the record/ playback head.
2. Remove the hooks (A2) x 2 pcs., toward the center position as shown in Fig. 5-3. and then extract the erase head upward.

Note:

After replacing the heads and performing the azimuth adjustment, be sure to apply screwlock.

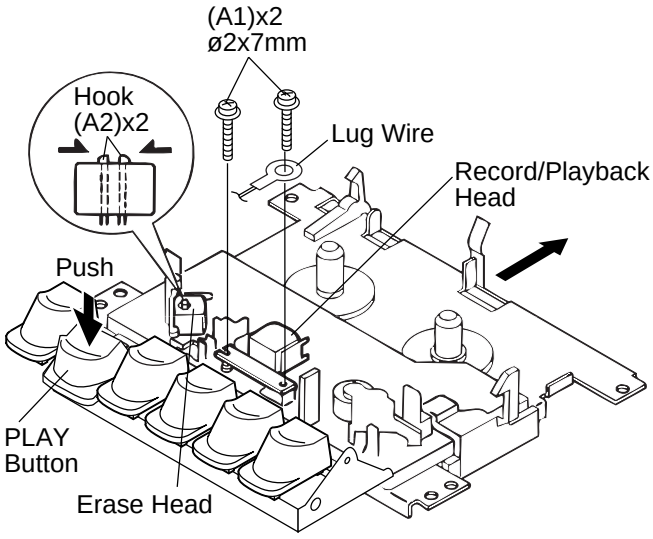


Figure 5-3

How to remove the pinch roller (See Fig. 5-4.)

1. Remove the screw (B1) x 1 pc., and remove the pinch roller upwards.

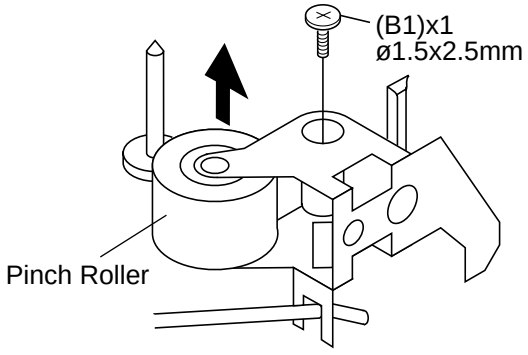


Figure 5-4

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How to remove the belts (See Fig. 6-1.)

1. Remove the main belt (C1) x 1 pc., from the motor pulley.
2. Remove the FF/REW belt (C2) x 1 pc., from the REW/FF roller.
3. Put on the belts in the reverse order of removal.

Note:
When putting on the belt, ascertain that the belt is not twisted, and clean it.

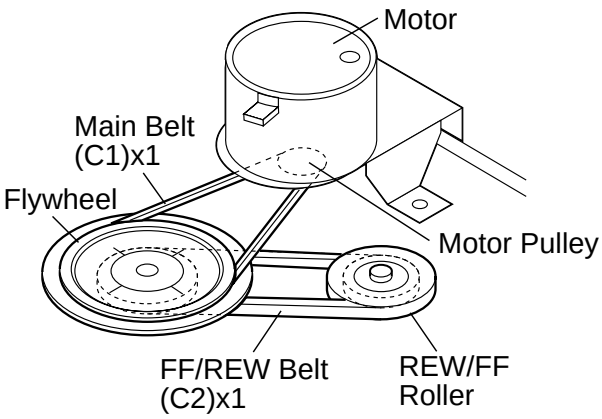


Figure 6-1

How to remove the motor (See Fig. 6-2.)

1. Remove the main belt. (See Fig. 6-1.)
2. Remove the screws (D1) x 2 pcs., to remove the motor bracket.
3. Remove the screws (D2) x 2 pcs., to remove the motor.

Note:
When mounting the motor, pay attention to the motor bracket angle.

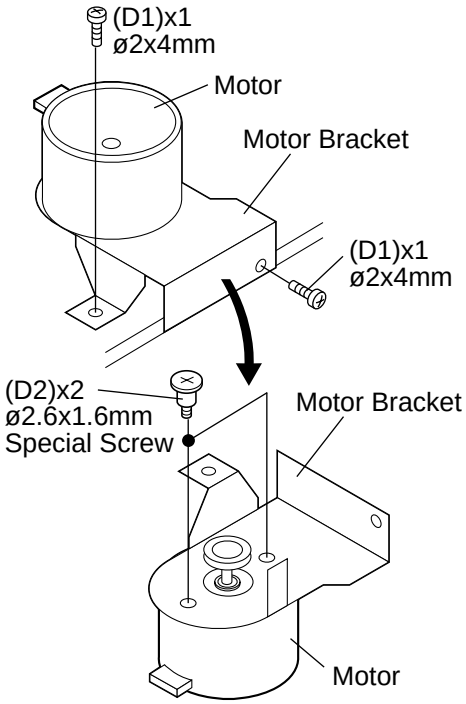


Figure 6-2

How to remove the flywheel (See Fig. 6-3.)

1. Remove the belt. (See Fig. 6-1.)
2. Remove the stop washer (E1) x 1 pc., with a small precision screwdriver to extract the flywheel from the capstan metal.

Note:
When the stop washer is deformed or damaged, replace it with a new one.

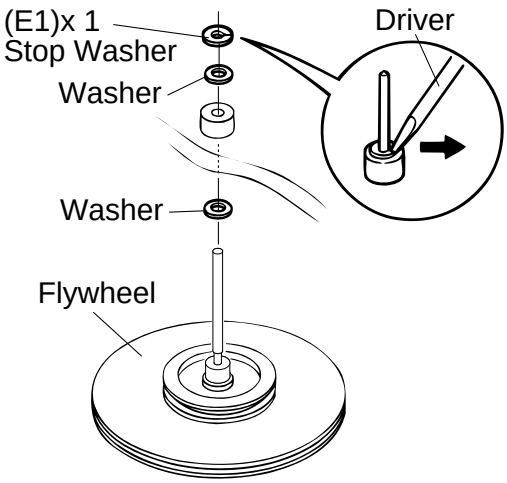


Figure 6-3

How to reinstall the parts

Install each part in the reverse order of the removal with care.

ADJUSTMENT

TUNER SECTION

fL: Low-range frequency
fH: High-range frequency

FM Section						
Step	**Alignment Frequency**	**Test Equipment**	**Signal-in**	**Signal-out**	**Adjust**	**Remark**
1	FM IF: 10.7 MHz (T108) FM DETECTION: (T106)	(1) FM IF sweep generator (2) Alignment oscilloscope (3) Power supply	Inject the IF sweep signal through 300 pF capacitor to point TP2	Signal are taken out from point TP3	Adjust T106, T108 and repeat to get best "S" curve with center at 10.7 MHz	(1) Band SW in FM. (2) VOL. & TONE control in MIN. position (3) Tune P.V.C. to high end
2	FM BAND COVERAGE fH: 108.2 MHz	(1) FM RF sweep generator (2) Alignment oscilloscope (3) Power supply	Inject the RF signal directly to point TP1	Same as step 1	Adjust P.V.C. (TC1) get MAX. output	Same as step 1
3	FM BAND COVERAGE fL: 87.4 MHz	Same as step 2	Same as step 2	Same as step 1	Adjust L103 to get MAX. output	Tune P.V.C. to low end
4	Repeat step 2, 3 until no further improvement can be made.					
5	FM TRACKING fH: 106 MHz	Same as step 2	Same as step 2	Same as step 1	Adjust P.V.C. (TC2) to get MAX. output	Tune P.V.C. to 106 MHz
6	FM TRACKING fL: 90 MHz	Same as step 2	Same as step 2	Same as step 1	Adjust L102 to get MAX. output	Tune P.V.C. to 90 MHz
7	Repeat step 5, 6 and then step 2, 3, 5, 6 until no further improvement can be made.					

FM Stereo Section						
Step	**Alignment Frequency**	**Test Equipment**	**Signal-in**	**Signal-out**	**Adjust**	**Remark**
1	VCO: 75 kHz	(1) Frequency counter (2) Power supply (3) FM Signal generator	Inject MONO signal at 98 MHz directly to point TP1 and ground	Through test circuit as Fig 7.	Adjust VR102 let Frequency counter value: 76 K ± 200 Hz.	(1) FM and stereo position (2) Tune radio to 98 MHz

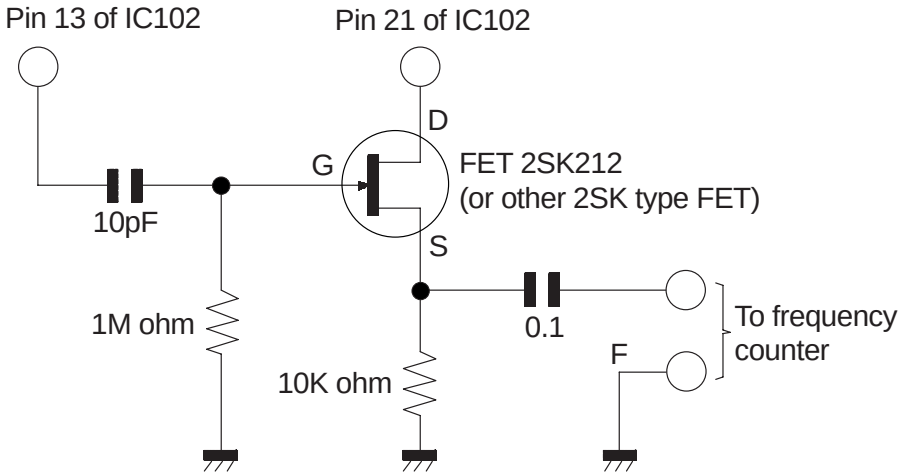


Figure 7

QT-80W

MW Section						
Step	**Alignment Frequency**	**Test Equipment**	**Signal-in**	**Signal-out**	**Adjust**	**Remark**
1	MW IF: 455 kHz	(1) AM IF sweep generator with loop antenna (2) Alignment oscilloscope (3) Power supply	Let the MW ANT coil close to the generator ANT.	Take out the signal from point TP4	Adjust T107 get MAX. output at 455 kHz	(1) Band SW in MW position (2) VOL. control in MIN. position (3) Tune P.V.C. to high end
2	MW TRACKING fH: 1,650 kHz	(1) MW sweep generator with antenna (2) Alignment oscilloscope (3) Power supply	Same as step 1	Same as step 1	Adjust P.V.C. (TC3) get MAX. output at 1,650 kHz	Same as step 1
3	MW BAND COVERAGE fL: 515 kHz	Same as step 2	Same as step 1	Same as step 1	Adjust T103 to get MAX. output at 515 kHz	Tune P.V.C. to low end
4	Repeat step 2, 3 until no further improvement can be made.					
5	MW BAND COVERAGE fH: 1,400 kHz	Same as step 2	Same as step 1	Same as step 1	Adjust P.V.C. (TC4) get MAX. output at 1,400 kHz	Tune P.V.C. to 1.400 kHz
6	MW TRACKING fL: 600 kHz	Same as step 2	Same as step 1	Same as step 1	Adjust L109 get MAX. output at 600 kHz	Tune P.V.C. to 600 kHz
7	Repeat step 5, 6 and then step 2, 3, 5,6 until no further improvement can be made.					

SW1 Section						
Step	**Alignment Frequency**	**Test Equipment**	**Signal-in**	**Signal-out**	**Adjust**	**Remark**
1	SW1 BAND COVERAGE fH: 7.4 MHz	(1) SW1 sweep generator with antenna (2) Alignment oscilloscope (3) Power supply	Let the MW ANT coil close to the generator ANT. point TP1	Take out the signal from point TP4	Adjust CT102 get MAX. output at 7.4 MHz	(1) Band SW in SW1 position (2) VOL. control in MIN. position (3) Tune P.V.C. to high end
2	SW1 BAND COVERAGE fL: 2.25MHz	Same as step 1	Same as step 1	Same as step 1	Adjust T104 get MAX. output at 2.25 MHz	Tune P.V.C. to low end
3	Repeat step 1, 2 until no further improvement can be made.					
4	SW1 TRACKING fH: 6 MHz	Same as step 1	Same as step 1	Same as step 1	Adjust CT104 get MAX. output at 6 MHz	Tune P.V.C. to 6 MHz
5	SW1 TRACKING fL: 2.6 MHz	Same as step 1	Same as step 1	Same as step 1	Adjust T101 get MAX. output at 2.6 MHz	Tune P.V.C. to 2.6 MHz
6	Repeat step 4, 5 and then step 1, 2, 4, 5 until no further improvement can be made.					

SW2 Section						
Step	**Alignment Frequency**	**Test Equipment**	**Signal-in**	**Signal-out**	**Adjust**	**Remark**
1	SW2 BAND COVERAGE fH: 22.5 MHz	(1) SW2 sweep generator (2) Alignment oscilloscope (3) Power supply	Inject the RF signal directly to point TP1	Take out the signal from point TP4	Adjust CT101 get MAX. output at 22.5 MHz	(1) Band SW in SW2 position (2) VOL. control in MIN. position (3) Tune P.V.C. to high end
2	SW2 BAND COVERAGE fL: 7.2 MHz	Same as step 1	Same as step 1	Same as step 1	Adjust T105 get MAX. output at 7.2 MHz	Tune P.V.C. to low end
3	Repeat step 1, 2 until no further improvement can be made.					
4	SW2 TRACKING fH: 19 MHz	Same as step 1	Same as step 1	Same as step 1	Adjust CT103 get MAX. output at 19 MHz	Tune P.V.C. to 19 MHz
5	SW2 TRACKING fL: 8.5 MHz	Same as step 1	Same as step 1	Same as step 1	Adjust T102 get MAX. output at 8.5 MHz	Tune P.V.C. to 8.5 MHz
6	Repeat step 4, 5 and then step 1, 2, 4, 5 until no further improvement can be made.					

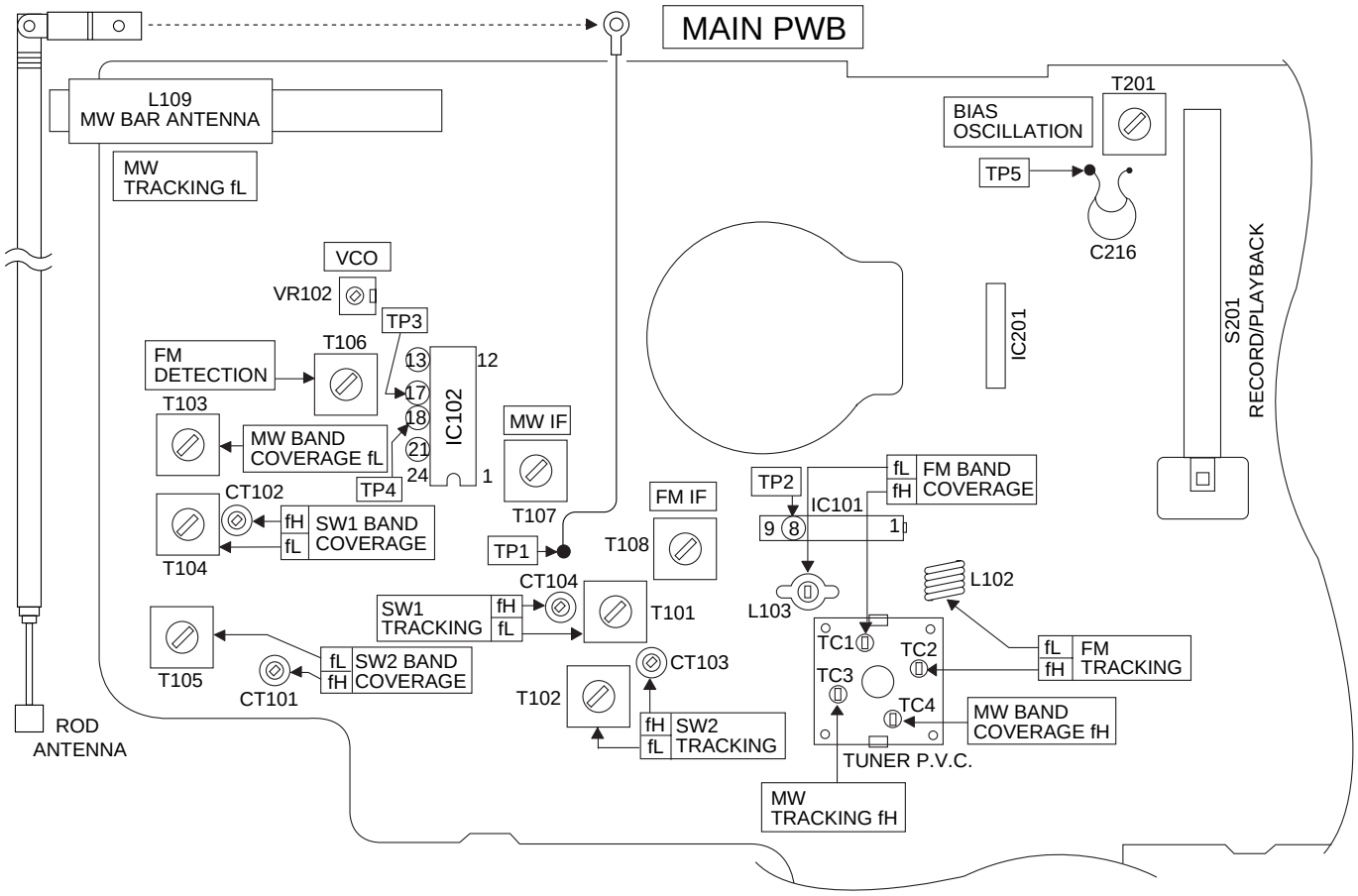


Figure 9-1 ADJUSTMENT POINTS

MECHANISM SECTION

TAPE Section					
Step	**Item**	**Condition**	**Connection**	**Adjust**	**Output**
1	Head adjustment	Playback test tape MTT-113 6.3 kHz	Connect VTVM and oscilloscope to speaker output	Head fixing screw (see Fig 9-3.)	Adjust to get MAX. audio output
2	Bias Frequency adjustment	Record position	Connect frequency counter to TP5 and ground	Adjust T201 (Bias Oscillation)	80 kHz ± 1 kHz
3	Beat cancel	Record position	Same as step 3	S201 from playback to record	75 kHz ± 0.5 kHz

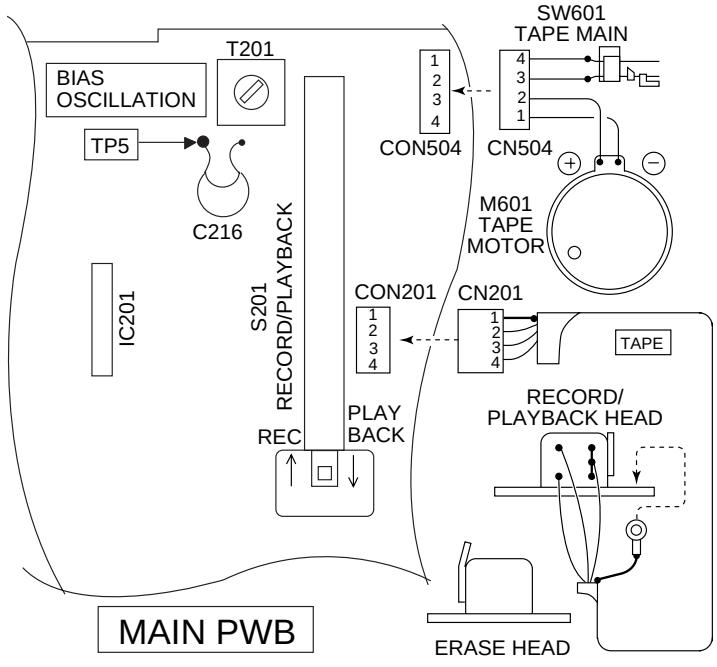


Figure 9-2 ADJUSTMENT POINTS

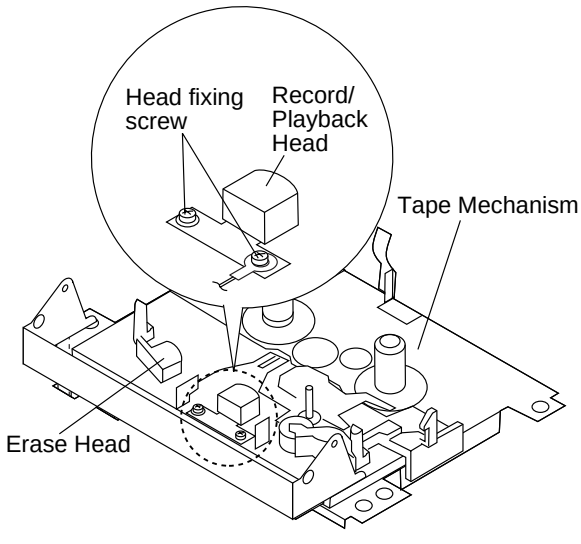


Figure 9-3

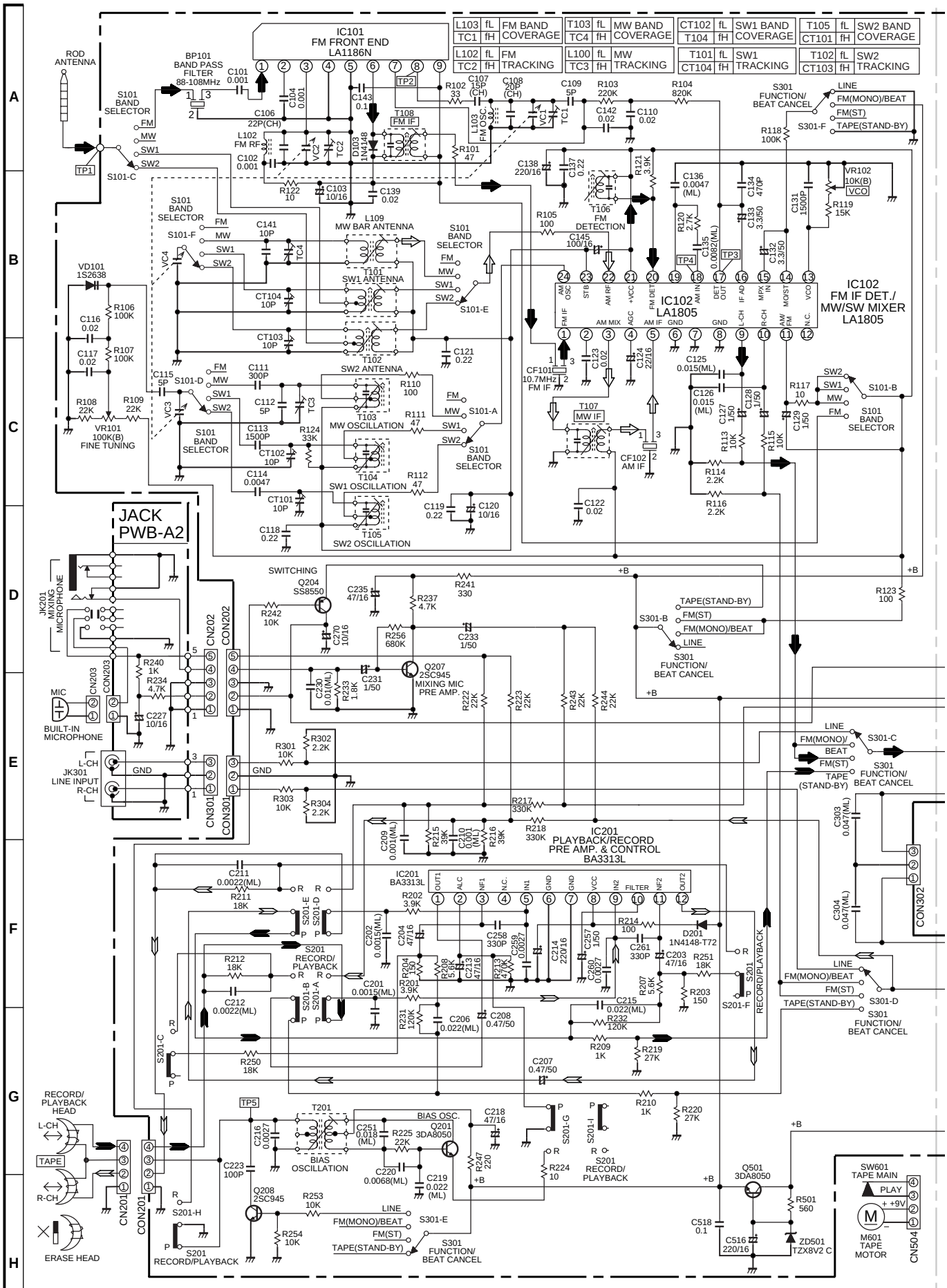
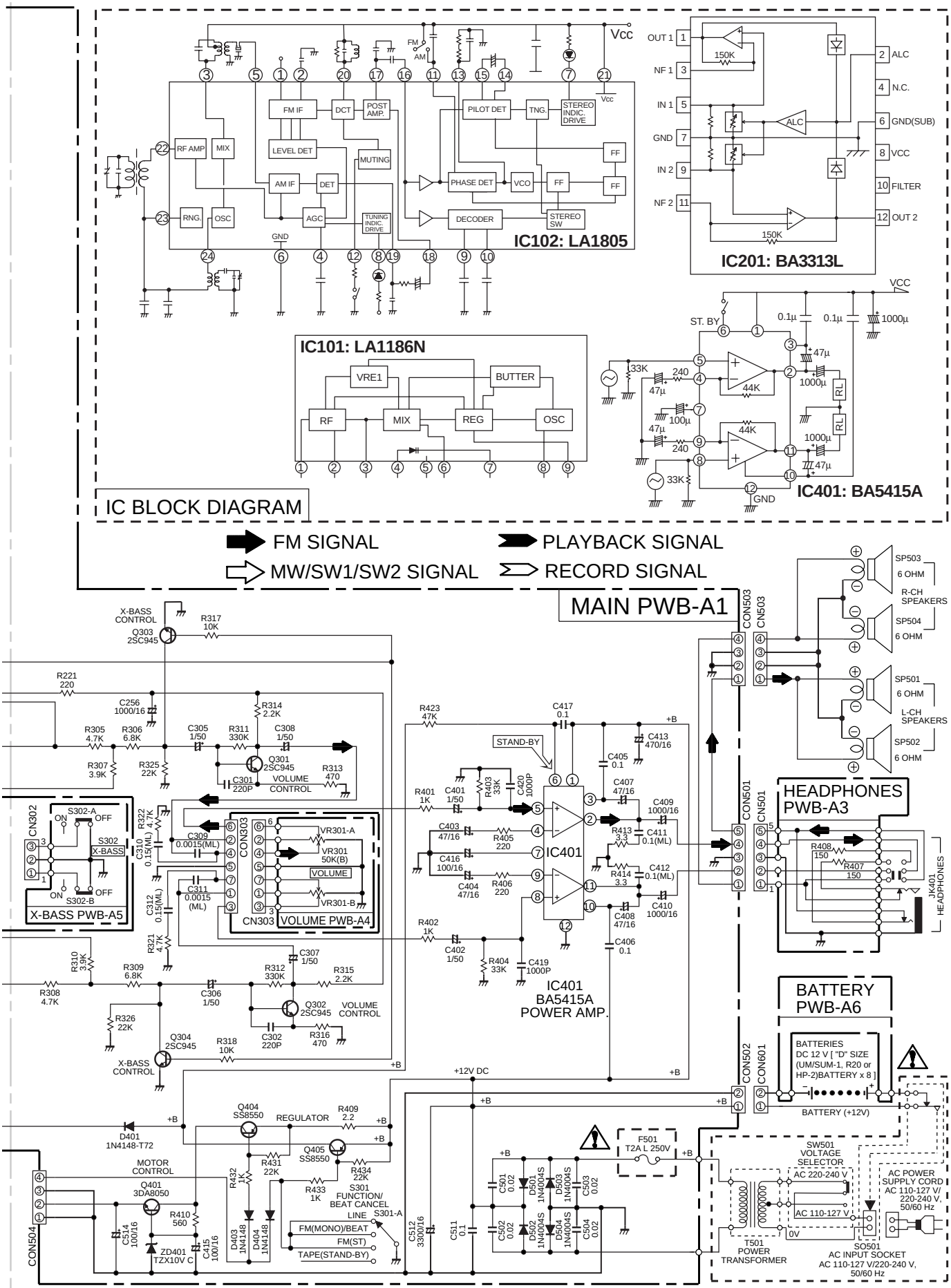


Figure 10 SCHEMATIC DIAGRAM (1/2)



7	8	9	10	11	12

Figure 11 SCHEMATIC DIAGRAM (2/2)

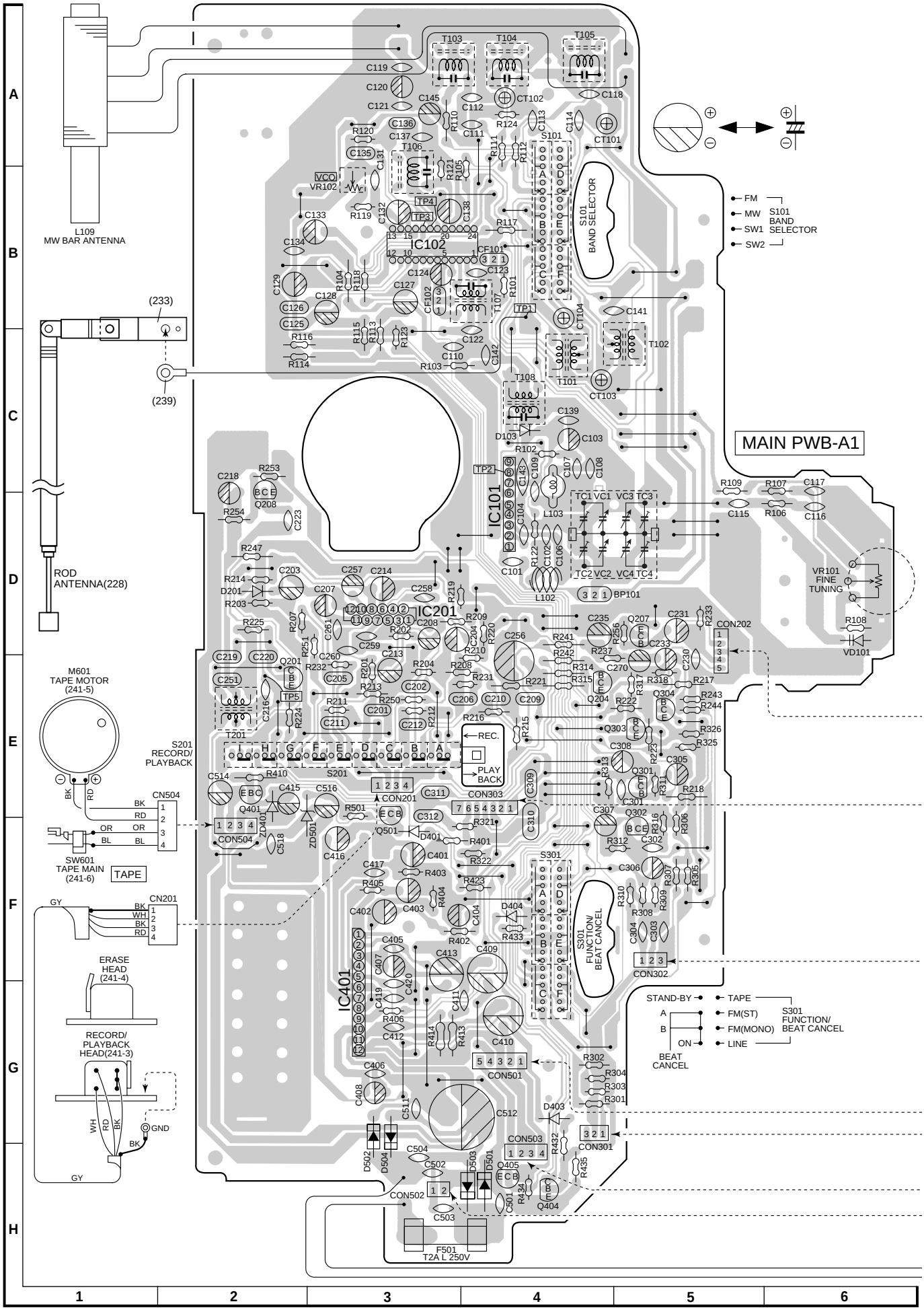


Figure 12 WIRING OF P.W.BOARD (1/2)

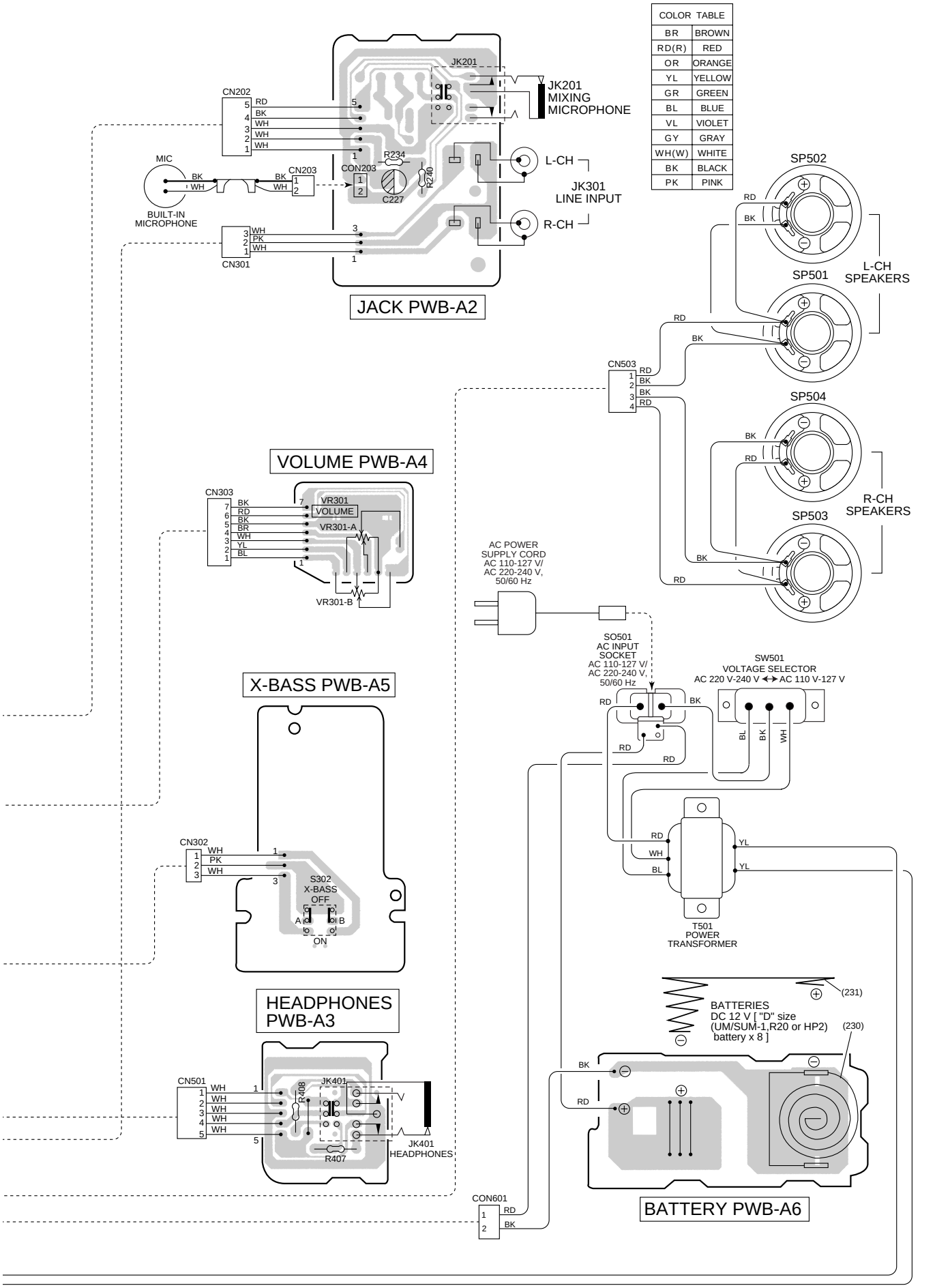


Figure 13 WIRING OF P.W.BOARD (2/2)

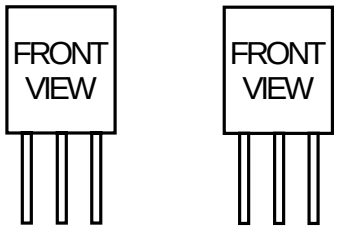
NOTES ON SCHEMATIC DIAGRAM

- Resistor:
  To differentiate the units of resistors, such symbol as K and M are used: the symbol K means 1000 ohm and the symbol M means 1000 kohm and the resistor without any symbol is ohm-type resistor. Besides, the one with “Fusible” is a fuse type.
- Capacitor:
  To indicate the unit of capacitor, a symbol P is used: this symbol P means pico-farad and the unit of the capacitor without such a symbol is microfarad. As to electrolytic capacitor, the expression “capacitance/withstand voltage” is used.
  (CH), (TH), (RH), (UJ): Temperature compensation
  (ML): Mylar type
  (P.P.): Polypropylene type
- Schematic diagram and Wiring Side of P.W.Board for this model are subject to change for improvement without prior notice.
- Parts marked with “ ⚠ ” (⊏ ═ ═ ⊐) are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

- The indicated voltage in each section is the one measured by Digital Multimeter between such a section and the chassis with no signal given.

REF. NO	DESCRIPTION	POSITION
S101	BAND SELECTOR	FM—MW—SW1—SW2
S201	RECORD/PLAYBACK	REC—P.B.
S301	FUNCTION/ BEAT CANCEL	LINE
S302	X-BASS	OFF—ON
SW501	VOLTAGE SELECTOR	AC 220-240 V— AC 110-127 V
SW601	TAPE MAIN	OFF—ON

TYPES OF TRANSISTOR



2SC945
3DA8550
SS8550

3DA8050

VOLTAGE

IC101: LA1186N [FM]

Pin No.	1	2	3	4	5	6	7	8	9
Voltage	0.9V	1.5V	5.3V	0V	0V	5.3V	0V	4.7V	5.3V

IC102: LA1805 [FM]

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12
Voltage	1.5V	1.5V	5.5V	2.2V	1.5V	0V	0V	0V	2V	2V	4.8V	0.8V
Pin No.	13	14	15	16	17	18	19	20	21	22	23	24
Voltage	1.1V	1.5V	1.5V	1.2V	2.3V	0.22V	0.12V	5.5V	5.5V	0V	1.6V	0.8V

IC102: LA1805 [MW/SW1/SW2]

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12
Voltage	1.55V	1.55V	6.7V	0.8V	1.55V	0V	0V	0V	2V	2V	6.5V	0.8V
Pin No	13	14	15	16	17	18	19	20	21	22	23	24
Voltage	0V	1.65V	1.1V	1.2V	1.65V	0.8V	0.55V	6.7V	6.5V	1.6V	1.6V	1.6V

IC201: BA3313L [PLAYBACK]

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12
Voltage	2.7V	0.25V	6.6V	0V	6.9V	0V	0V	0V	0V	5.2V	0V	3V

IC201: BA3313L [RECORD]

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12
Voltage	2.8V	0.26V	6.4V	0V	6.8V	0V	0V	0V	0V	0.265V	0V	3V

IC401: BA5415A [FULL POWER]

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12
Voltage	13V	7.7V	13V	0.6V	5V	5.2V	13V	0V	0.6V	13V	7.8V	0V

Q201: 3DA8050

Pin No.	1	2	3
Voltage	E: 7V	B: 6.7V	C:7.6V

Q204: SS8550

Pin No.	1	2	3
Voltage	E:7.5V	C:7.5V	B: 0V

Q207: 2SC945

Pin No.	1	2	3
Voltage	E: 0V	C:3.5V	B:0.5V

Q301: 2SC945

Pin No.	1	2	3
Voltage	E: 0V	C:4V	B:0.7V

Q302: 2SC945

Pin No.	1	2	3
Voltage	E: 0V	C:4V	B:0.7V

Q303: 2SC945

Pin No.	1	2	3
Voltage	E: 0V	C: 0V	B: 5V

Q304: 2SC945

Pin No.	1	2	3
Voltage	E: 0V	C: 0V	B: 5V

Q404: SS8550

Pin No.	1	2	3
Voltage	E: 15V	C: 15V	B: 0V

Q405: SS8550

Pin No.	1	2	3
Voltage	E: 15V	C: 15V	B: 15V

Q501: 3DA8050

Pin No.	1	2	3
Voltage	E:7.5V	C: 15V	B:8.2V

SHARP PARTS GUIDE

STEREO RADIO CASSETTE RECORDER

MODEL QT-80W

"HOW TO ORDER REPLACEMENT PARTS"

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4. DESCRIPTION

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Explanation of capacitors/resistors parts codes

Capacitors

VCC ..... Ceramic type
VCK ..... Ceramic type
VCT ..... Semiconductor type
VC • • MF ..... Cylindrical type (without lead wire)
VC • • MN ..... Cylindrical type (without lead wire)
VC • • TV ..... Square type (without lead wire)
VC • • TQ ..... Square type (without lead wire)
VC • • CY ..... Square type (without lead wire)
VC • • CZ ..... Square type (without lead wire)
VC • • • • • • • • • J .. The 13th character represents capacity difference.
("J" ±5%, "K" ±10%, "M" ±20%, "N" ±30%,
"C" ±0.25 pF, "D" ±0.5 pF, "Z" +80-20%.)

If there are no indications for the electrolytic capacitors, error is ±20%.

Resistors

VRD ..... Carbon-film type
VRS ..... Carbon-film type
VRN ..... Metal-film type
VR • • MF ..... Cylindrical type (without lead wire)
VR • • MN ..... Cylindrical type (without lead wire)
VR • • TV ..... Square type (without lead wire)
VR • • TQ ..... Square type (without lead wire)
VR • • CY ..... Square type (without lead wire)
VR • • CZ ..... Square type (without lead wire)
VR • • • • • • • • • J .. The 13th character represents error.
("J" ±5%, "F" ±1%, "D" ±0.5%.)

If there are no indications for other parts, the resistors are ±5% carbon-film type.

NOTE:
Parts marked with "⚠" are important for maintaining the safety of the set.
Be sure to replace parts with specified ones for maintaining the safety and performance of the set.

QT-80W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
INTEGRATED CIRCUITS				
IC101	VHILA1186N/-1	J	AE	FM Front End,LA1186N
IC102	VHILA1805//-1	J	AM	FM IF Det./MW/SW Mixer,LA1805
IC201	92L2301-461001	J		Playback/Record Pre Amp.& Control,BA3313L
IC401	92L2301-455001	J		Power Amp.,BA5415A
TRANSISTORS				
Q201	92L2103-109001	J		Silicon,NPN,3DA8050
Q204	92L2101-025001	J		Silicon,PNP,SS8550
Q207,208	92L2103-032001	J		Silicon,NPN,2SC945
Q301~304	92L2103-032001	J		Silicon,NPN,2SC945
Q401	92L2103-109001	J		Silicon,NPN,3DA8050
Q404	92L2101-025001	J		Silicon,PNP,SS8550
Q405	92L2101-025001	J		Silicon,PNP,SS8550
Q501	92L2103-109001	J		Silicon,NPN,3DA8050
DIODES				
D103	VHD1N4148//-1	J	AA	Silicon,1N4148
D201	92L2501-010001	J		Silicon,1N4148-T72
D401	92L2501-010001	J		Silicon,1N4148-T72
D403,404	VHD1N4148//-1	J	AA	Silicon,1N4148
D501~504	VHD1N4004S/-1	J	AB	Silicon,1N4004S
VD101	92L2507-001001	J		Silicon,1S2658
ZD401	92L2504-003001	J		Zener,10V,TZX10V C
ZD501	92L2504-003019	J		Zener,8.2V,TZX8V2 C
FILTERS				
BP101	92L4401-008001	J		Band Pass Filter
CF101	RFILF0072AFZZ	J	AG	FM IF,10.7 MHz
CF102	92L4403-011001	J		AM IF
TRANSFORMER				
⚠ T501	92L5102-109001	J		Power
COILS				
L102	92L1107-009001	J		FM RF
L103	92L1107-007001	J		FM Oscillation
L109	92L7602-001001	J		MW Bar Antenna
T101	92L1111-025001	J		SW1 Antenna
T102	92L1104-092001	J		SW2 Antenna
T103	92L1104-091001	J		MW Oscillation
T104	92L1104-090001	J		SW1 Oscillation
T105	92L1104-089001	J		SW2 Oscillation
T106	92L1104-024001	J		FM Detection
T107	92L1104-094001	J		MW IF
T108	92L1104-038001	J		FM IF,10.70 MHz
T201	92L1104-093001	J		Bias Oscillation
VARIABLE RESISTORS				
VR101	92L1701-052001	J		100 kohm (B),Semi-VR [Fine Tuning]
VR102	92L1601-001001	J		10 kohm (B),Semi-VR [VCO]
VR301	92L1701-049001	J		50 kohms (B)×2 [Volume]
VARIABLE CAPACITORS				
CT101~104	92L1341-007001	J		Trimmer,10 pF
VC1~4	92L1340-003001	J		Variable Capacitor with Trimmer (TC1~4)
CAPACITORS				
C101,102	VCCSPA1HL102J	J	AA	0.001 µF,50V
C103	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic
C104	VCCSPA1HL102J	J	AA	0.001 µF,50V
C106	VCCCPA1HH220J	J	AA	22 pF (CH),50V
C107	VCCCPA1HH150J	J	AA	15 pF (CH),50V
C108	VCCCPA1HH200J	J	AA	20 pF (CH),50V
C109	VCCSPA1HL5R0D	J	AA	5 pF,50V
C110	VCKYPA1HF203Z	J		0.02 µF,50V
C111	VCCSPA1HL301K	J		300 pF,50V
C112	VCCSPA1HL5R0D	J	AA	5 pF,50V
C113	VCTYPA1HB152K	J		1500 pF,50V
C114	VCKYPA1HF472Z	J		0.0047 µF,50V
C115	VCCSPA1HL5R0D	J	AA	5 pF,50V
C116,117	VCKYPA1HF203Z	J		0.02 µF,50V
C118,119	VCKYPA1CF224Z	J		0.22 µF,16V
C120	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic
C121	VCKYPA1CF224Z	J		0.22 µF,16V
C122	92L1321-002005	J		0.02 µF,50V
C123	VCKYPA1HF203Z	J		0.02 µF,50V
C124	VCEAZA1CW226M	J	AC	22 µF,16V,Electrolytic
C125,126	VCQYKA1HM153K	J	AB	0.015 µF,50V,Mylar
C127~129	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C131	VCTYPA1HB152K	J		1500 pF,50V
C132,133	VCEAZA1HW335M	J	AB	3.3 µF,50V,Electrolytic
C134	VCTYPA1HB471K	J		470 pF,50V
C135	VCQYKA1HM822K	J	AA	0.0082 µF,50V,Mylar
C136	VCTYPA1HM472K	J		4700 pF,50V
C137	VCKYPA1CF224Z	J		0.22 µF,16V
C138	VCEAZA1CW227M	J	AC	220 µF,16V,Electrolytic
C139	VCKYPA1HF203Z	J		0.02 µF,50V
C141	VCCCPA1HH100J	J	AA	10 pF (CH),50V
C142	VCKYPA1HF203Z	J		0.02 µF,50V
C143	VCKYPA1HF104Z	J		0.1 µF,50V
C145	VCEAZA1CW107M	J	AC	100 µF,16V,Electrolytic
C201,202	VCQYKA1HM152K	J	AB	0.0015 µF,50V,Mylar
C203,204	VCEAZA1CW476M	J	AB	47 µF,16V,Electrolytic
C205,206	VCQYKA1HM223K	J	AB	0.022 µF,50V,Mylar
C207,208	VCEAZA1HW474M	J	AB	0.47 µF,50V,Electrolytic
C209,210	VCQYKA1HM102K	J	AA	0.001 µF,50V,Mylar
C211,212	VCQYKA1HM222K	J	AA	0.0022 µF,50V,Mylar
C213	VCEAZA1CW476M	J	AB	47 µF,16V,Electrolytic
C214	VCEAZA1CW227M	J	AC	220 µF,16V,Electrolytic
C216	92L1331-005013	J		0.0027 µF,100V
C218	VCEAZA1CW476M	J	AB	47 µF,16V,Electrolytic
C219	VCQYKA1HM223K	J	AB	0.022 µF,50V,Mylar
C220	VCQYKA1HM682K	J	AA	0.0068 µF,50V,Mylar
C223	VCCCPA1HH101J	J	AA	100 pF (CH),50V
C227	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic
C230	VCQYKA1HM103K	J	AA	0.01 µF,50V,Mylar
C231	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C233	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C235	VCEAZA1CW476M	J	AB	47 µF,16V,Electrolytic
C251	VCQYKA1HM183K	J	AB	0.018 µF,50V,Mylar
C256	VCEAZA1CW108M	J		1000 µF,16V,Electrolytic
C257	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C258	92L1321-001096	J		330 pF,50V
C259,260	92L1331-001023	J		0.0027 µF,100V
C261	92L1321-001096	J		330 pF,50V
C270	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic
C301,302	92L1321-001016	J		220 pF,50V
C303,304	VCQYKA1HM473K	J	AB	0.047 µF,50V,Mylar
C305~308	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C309	VCQYKA1HM152K	J	AB	0.0015 µF,100V,Mylar
C310	VCQYKA1HM154K	J	AB	0.15 µF,100V,Mylar
C311	VCQYKA1HM152K	J	AB	0.0015 µF,50V,Mylar
C312	VCQYKA1HM154K	J	AB	0.15 µF,100V,Mylar
C401,402	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C403,404	VCEAZA1CW476M	J	AB	47 µF,16V,Electrolytic
C405,406	VCKYPA1HF104Z	J		0.1 µF,50V
C407,408	VCEAZA1CW476M	J	AB	47 µF,16V,Electrolytic
C409,410	92L1301-041012	J		1000 µF,16V,Electrolytic
C411,412	VCQYKA1HM104K	J	AB	0.1 µF,50V,Mylar
C413	VCEAZA1CW477M	J	AC	470 µF,16V,Electrolytic
C415,416	VCEAZA1CW107M	J	AC	100 µF,16V,Electrolytic
C417	VCKYPA1HF104Z	J		0.1 µF,50V
C419,420	VCTYPA1HB102K	J	AA	1000 pF,50V
C501~504	VCKYPA1HF203Z	J		0.02 µF,50V
C511	VCKYPA1HF104Z	J		0.1 µF,50V
C512	92L1301-041025	J		3300 µF,16V,Electrolytic
C514	VCEAZA1CW107M	J	AC	100 µF,16V,Electrolytic
C516	VCEAZA1CW227M	J	AC	220 µF,16V,Electrolytic
C518	VCKYPA1HF104Z	J		0.1 µF,50V
RESISTORS				
R101	VRD-ST2CD470J	J	AA	47 ohms,1/6W
R102	VRD-ST2CD330J	J	AA	33 ohms,1/6W
R103	VRD-ST2CD224J	J	AA	220 kohms,1/6W
R104	VRD-ST2CD824J	J	AA	820 kohms,1/6W
R105	VRD-ST2CD101J	J	AA	100 ohm,1/6W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
R106,107	VRD-ST2CD104J	J	AA	100 kohm,1/6W
R108,109	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R110	VRD-ST2CD101J	J	AA	100 ohm,1/6W
R111,112	VRD-ST2CD470J	J	AA	47 ohms,1/6W
R113	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R114	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R115	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R116	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R117	VRD-ST2CD100J	J	AA	10 ohm,1/6W
R118	VRD-ST2CD104J	J	AA	100 kohm,1/6W
R119	VRD-ST2CD153J	J	AA	15 kohms,1/6W
R120	VRD-ST2CD272J	J	AA	2.7 kohms,1/6W
R121	VRD-ST2CD392J	J	AA	3.9 kohms,1/6W
R122	VRD-ST2CD100J	J	AA	10 ohm,1/6W
R123	VRD-ST2CD101J	J	AA	100 ohm,1/6W
R124	VRD-ST2CD333J	J	AA	33 kohms,1/6W
R201,202	VRD-ST2CD392J	J	AA	3.9 kohms,1/6W
R203,204	VRD-ST2CD151J	J	AA	150 ohms,1/6W
R207,208	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W
R209,210	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R211,212	VRD-ST2CD183J	J	AA	18 kohms,1/6W
R213	VRD-ST2CD474J	J	AA	470 kohms,1/6W
R214	VRD-ST2CD331J	J	AA	330 ohms,1/6W
R215,216	VRD-ST2CD393J	J	AA	39 kohms,1/6W
R217,218	VRD-ST2CD334J	J	AA	330 kohms,1/6W
R219,220	VRD-ST2CD273J	J	AA	27 kohms,1/6W
R221	VRD-ST2CD221J	J	AA	220 ohms,1/6W
R222,223	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R224	VRD-ST2CD100J	J	AA	10 ohm,1/6W
R225	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R231,232	VRD-ST2CD124J	J	AA	120 kohms,1/6W
R233	VRD-ST2CD182J	J	AA	1.8 kohms,1/6W
R234	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
R237	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
R240	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R241	VRD-ST2CD331J	J	AA	330 ohms,1/6W
R242	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R243,244	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R247	VRD-ST2CD221J	J	AA	220 ohms,1/6W
R250,251	VRD-ST2CD183J	J	AA	18 kohms,1/6W
R253,254	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R256	VRD-ST2CD684J	J	AA	680 kohms,1/6W
R301	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R302	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R303	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R304	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R305	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
R306	VRD-ST2CD682J	J	AA	6.8 kohms,1/6W
R307	VRD-ST2CD392J	J	AA	3.9 kohms,1/6W
R308	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
R309	VRD-ST2CD682J	J	AA	6.8 kohms,1/6W
R310	VRD-ST2CD392J	J	AA	3.9 kohms,1/6W
R311,312	VRD-ST2CD334J	J	AA	330 kohms,1/6W
R313	VRD-ST2CD471J	J	AA	470 ohms,1/6W
R314,315	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R316	VRD-ST2CD471J	J	AA	470 ohms,1/6W
R317,318	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R321,322	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
R325,326	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R401,402	VRD-ST2CD183J	J	AA	18 kohms,1/6W
R403,404	VRD-ST2CD333J	J	AA	33 kohms,1/6W
R405,406	VRD-ST2CD221J	J	AA	220 ohms,1/6W
R407,408	VRD-ST2EE151J	J	AA	150 ohms,1/4W
R409	VRD-ST2CD2R2J	J	AA	2.2 ohms,1/4W
R410	VRD-ST2CD561J	J	AA	560 ohms,1/6W
R413,414	VRD-ST2EE3R3J	J	AA	3.3 ohms,1/4W
R423	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R432,433	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R434	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R501	VRD-ST2CD561J	J	AA	560 ohms,1/6W

OTHER CIRCUITRY PARTS

CN201	92L3421-773001	J	Connector Ass'y,4Pin
CN202	92L3421-776001	J	Connector Ass'y,5Pin
CN203	92L3421-775001	J	Connector Ass'y,2Pin
CN301	92L3421-799001	J	Connector Ass'y,3Pin
CN302	92L3421-777001	J	Connector Ass'y,3Pin
CN303	92L3421-780001	J	Connector Ass'y,7Pin
CN501	92L3421-778001	J	Connector Ass'y,5Pin
CN503	92L3421-783001	J	Connector Ass'y,4Pin
CN504	92L3421-774001	J	Connector Ass'y,4Pin

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
CON201,202	92L3101-054003	J		Plug,4Pin
CON203	92L3101-054001	J		Plug,2Pin
CON301,302	92L3101-054002	J		Plug,3Pin
CON303	92L3101-054006	J		Plug,7Pin
CON501	92L3101-094004	J		Plug,5Pin
CON502	92L3101-094001	J		Plug,2Pin
CON503,504	92L3101-094003	J		Plug,4Pin
CON601	92L3421-782001	J		Connector Ass'y,2Pin
⚠ F501	92L5301-021001	J		Fuse,T2A L 250V
JK201	92L3202-013001	J		Jack,Mixing Microphone
JK301	92L3201-073001	J		Jack,Line Input
JK401	92L3202-024001	J		Jack,Headphones
M601(241-5)	92L02103007B-0	J		Motor with Pulley [Tape]
MIC	92L7201-002001	J		Built-in Microphone
S101	92L4103-022001	J		Switch,Slide Type[Band Selector]
S201	92L4104-013001	J		Switch,Push Type [Record/Playback]
S301	92L4103-022001	J		Switch,Slide Type [Function/Beat Cancel]
S302	92L4104-002001	J		Switch,Push Type [X-BASS]
⚠ SO501	92L3204-016001	J		AC Input Socket
SP501~504	92L4801-083001	J		Speaker
⚠ SW501	92L4106-011001	J		Switch,Slide Type [Voltage Selector]
SW601(241-6)	92L4110-007001	J		Switch,Leaf Type [Tape Main]

CABINET PARTS

201	92L799QT800101	J		Front Cabinet Ass'y
202	92L799QT800301	J		Rear Cabinet Ass'y
202- 1	92L202QT800101	J		Rear Cabinet
202- 2	92L236QT800101	J		Plate,Battery Cover
203	92L799QT800501	J		Top Panel Ass'y
203- 1	92L201QT800101	J		Top Panel
203- 2	92L286QT800101	J		Name Plate,SHARP
204	92L799QT800601	J		Dial Drum Ass'y
204- 1	92L242QT800101	J		Dial Drum
204- 2	92L579QT800101	J		Label,Frequency Range
205	92L210QT800101	J		Cover,Battery
206	92L211QT800101	J		Cover,Cassette Holder
207	92L220QT800101	J		Bracket,Tape Mechanism/Main PWB
208	92L226QT800101	J		Bracket,Tuning Knob
209	92L227QT800101	J		Bracket,Cassette Holder Cover
210	92L248QT800101	J		Handle
211	92L251QT800101	J		Holder,Bar Antenna
212	92L260QT800101	J		Lens,Dial Tuning
213	92L270QT800101	J		Knob,Tuning
214	92L270QT800201	J		Knob,Fine Tuning
215	92L272QT800101	J		Button,Record
216	92L272QT800201	J		Button,Play
217	92L272QT800301	J		Button,Rewind
218	92L272QT800401	J		Button,Fast Forward
219	92L272QT800501	J		Button,Stop/Eject
220	92L272QT800601	J		Button,Pause
221	92L273QT800101	J		Knob,Volume
222	92L273QT800201	J		Button,X-BASS
223	92L278QT800101	J		Knob,Band Selector
224	92L278QT800101	J		Knob,Function
225	92L289QT800101	J		Ring,Volume Knob
226	92L290QT800101	J		Gear,Dial
227	92L430QT800101	J		Heat Sink
228	92L43330616501	J		Rod Antenna
229	92L471QT800101	J		Spring,Cassette Holder
230	92L47423010101	J		Spring,Battery,-
231	92L47470120101	J		Spring,Battery,+
232	92L476QT800101	J		Spring,Record
233	92L489QT800101	J		Bracket,Rod Antenna
234	92L579QT800103	J		Label,Specifications
235	92L250QT800101	J		Bracket,X-BASS PWB
236	92L70338050101	J		Damper Gear Ass'y
237	92L42838560501	J		Bracket,Tape Mechanism
238	92L7603-002001	J		Ferrite Bar
239	92L3451-000127	J		Lead Wire with Lug
⚠ 240	92L45670120101	J		Holder,Fuse
241	92L7702-003001	J		Tape Mechanism Ass'y
241- 1	92L02104003A-0	J		Belt,REW/FF
241- 2	92L02104007A-0	J		Belt,Main
241- 3	92L155-2AM	J		Head,Record/Playback
241- 4	92L6PA	J		Head,Erase
241- 5(M601)	92L02103007B-0	J		Motor with Pulley [Tape]
241- 6(SW601)	92L4110-007001	J		Switch,Leaf Type [Tape Main]

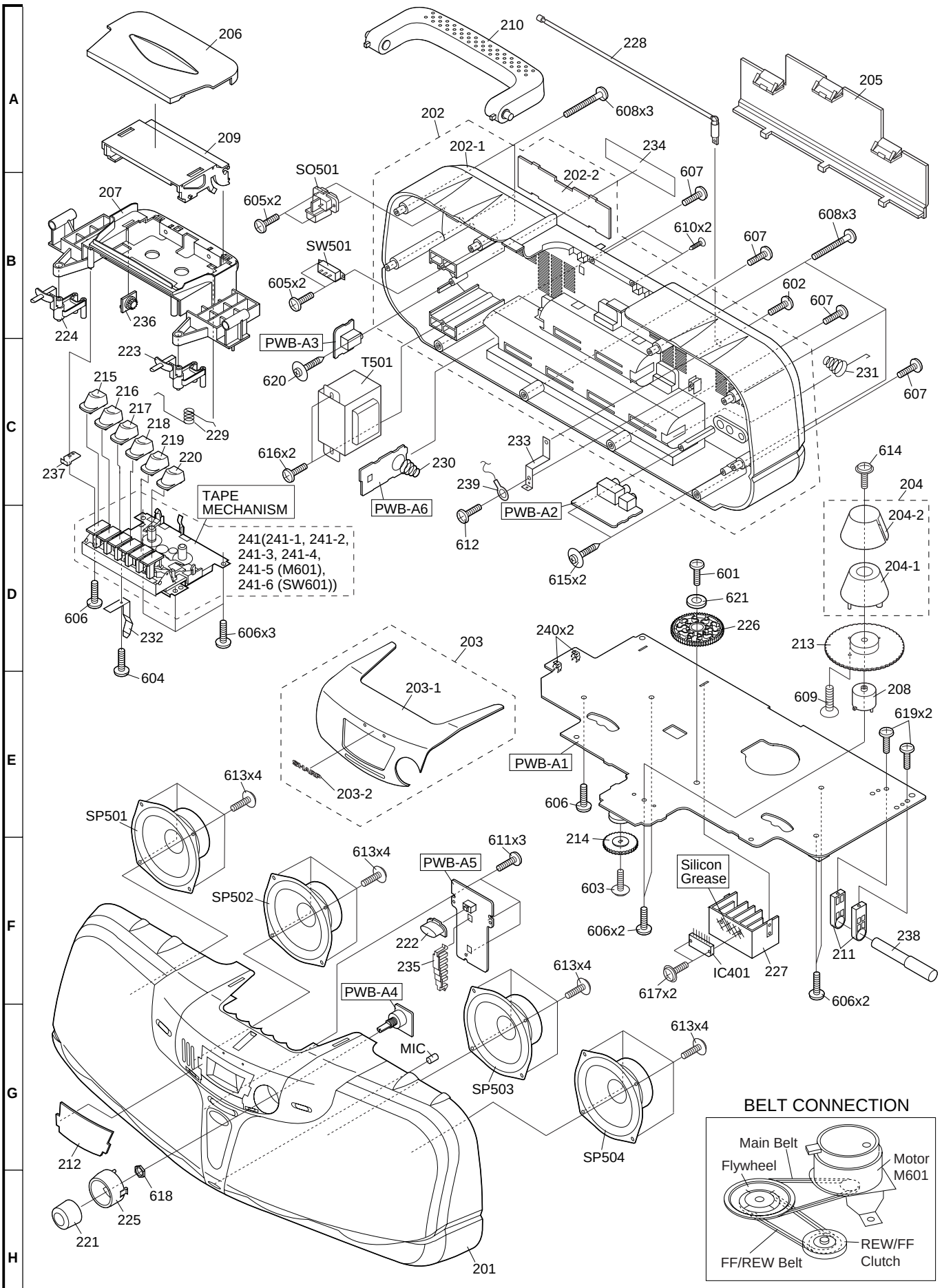
NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
601	92L60026450800	J		Screw,ø2.6×8mm
602	92L60030500610	J		Screw,ø3×6mm
603	92L60220500410	J		Screw,ø2×4mm
604	92L60620400410	J		Screw,ø2×4mm
605	92L61030010810	J		Screw,ø3×8mm
606	92L61030011010	J		Screw,ø3×10mm
607	92L61030011210	J		Screw,ø3×12mm
608	92L61030023010	J		Screw,ø3×30mm
609	92L61126010800	J		Screw,ø2.6×8mm
610	92L61130011210	J		Screw,ø3×12mm
611	92L61226010810	J		Screw,ø2.6×8mm
612	92L61230010810	J		Screw,ø3×8mm
613	92L61430011010	J		Screw,ø3×10mm
614	92L61530041010	J		Screw,ø3×10mm
615	92L61540021410	J		Screw,ø4×14mm
616	92L61540041410	J		Screw,ø4×14mm
617	92L62030061070	J		Screw,ø3×10mm
618	92L66090752012	J		Nut,ø9×ø12×2mm
619	92L62030061070	J		Screw,ø3×10mm
620	92L61440041010	J		Screw,ø4×10mm
621	92L53008003008	J		Washer,ø3×ø8×0.8mm

ACCESSORIES/PACKING PARTS

⚠	QACCB0012AW00	J	AS	AC Power Supply Cord
⚠	QACCE0007AW00	J	AH	AC Power Supply Cord
⚠	QACCL0002AW00	J	AN	AC Power Supply Cord
⚠	QACCL0008AW00	J		AC Power Supply Cord
⚠	QPLGA0003AWZZ	J	AF	Adaptor,AC Plug
⚠	QPLGA0004AWZZ	J	AF	Adaptor,AC Plug
	92L300QT800102	J		Packing Add.,Left/Right
	92L31020300401	J		Polyethylene Bag,Accessories
	92L31069420401	J		Polyethylene Bag,Unit
⚠	92L3404-074001	J		AC Power Supply Cord
	92L510QT800101	J		Packing Case
	92L563184-	J		Label,Serial No.
	92L579QT800201	J		Label,Feature
	92L580QT800101	J		Operation Manual
	92L593QT800101	J		Schematic Diagram

P.W.B. ASSEMBLY (Not Replacement Item)

PWB-A1~6	92L771QT800101	J	—	Main/Jack/Headphones/Volume/ X-BASS/Battery (Combined Ass'y)



Note: Only the unit and consumale parts are supplied as parts supply for the Tape mechanism.

Figure 4 CABINET EXPLODED VIEW

SHARP

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